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UNITED STATES DEPARTMENT OF AGRICULTURE
Rural Electrification Administration

August 8, 1956

E L E C T R I F I C A T I O N P R O G R A M S U M M A R Y

A -- Electrification Loan Program

Applications for loans

	<u>As of June 30, 1955</u>		<u>As of June 30, 1956</u>	
	<u>Number</u>	<u>Amount</u> (millions)	<u>Number</u>	<u>Amount</u> (millions)
Applications on hand, total	112	\$ 97.1	88	\$ 89.7
Section 4	105	96.8	81	88.5
Distribution	92	40.9	75	42.3
Generation	11	34.4	9	33.9
Transmission	31	21.5	17	12.3
Section 5	7	.3	7	1.2

- Notes: 1. Backlog of loan applications at beginning of fiscal year 1957 was the lowest level it has been for 10 years.
2. During fiscal 1956, applications totaling \$201.4 million were received by REA. Indications are that applications will continue to come in at a relatively heavy rate during 1957.

Available Funds

	<u>Fiscal</u> <u>1955</u> (millions)	<u>Fiscal</u> <u>1956</u> (millions)	<u>Fiscal</u> <u>1957</u> (millions)
Regular loan authorization	\$ 135	\$ 160	\$ 214 1/
Reserve loan authorization	35	100	1/
Carryover from previous year	47	56	25
Rescissions	<u>4</u>	<u>2</u>	<u>1 2/</u>
Total funds available	\$ 221	\$ 318	\$ 240

1/ The Agriculture Appropriations Act, 1957, provides for the "Rural Electrification program, \$214,000,000 of which not to exceed \$25,000,000 shall be placed in reserve to be borrowed under the same terms and conditions to the extent that such amount is required during the fiscal year 1957 under the then existing conditions for the expeditious and orderly development of the rural electrification program."

2/ Estimated.

Loans and Advances

	To June 30, 1956 (\$ are in millions)	Estimated to June 30, 1957 (\$ are in millions)
Loans, cumulative	\$ 3,238	\$ 3,422
Fiscal year, number	344	370
Fiscal year, amount	\$ 190	\$ 185
Advances, cumulative	\$ 2,755	\$ 2,915
Fiscal year, amount	\$ 155	\$ 160
Unadvanced loan funds	\$ 483	\$ 507

- Notes: 1. The fiscal 1956 loan program totalling approximately \$190 million was the largest for any year since 1951.
2. Loans in fiscal 1957 are expected to total only slightly less than those in 1956.
3. The pool of approved loan funds not yet advanced to borrowers amounts to about 15% of all loans made.

Loans by Purpose, annual

	<u>Percentage Distribution of Loans</u>			
	Fiscal 1954	Fiscal 1955	Fiscal 1956	Estimated for Fiscal 1957
Distribution (excluding system improvements)	57.1%	51.5%	42.1%	40.6%
System Improvements	23.0	21.5	23.2	21.6
Generation	11.1	11.8	18.2	24.3
Transmission	7.6	12.7	14.1	10.8
Section 5 (consumers facilities)	1.2	2.5	2.4	2.7
Total loans	100.0%	100.0%	100.0%	100.0%

- Notes: 1. Loans for construction of new distribution line are declining.
2. Loans for generation and transmission accounted for about 1/3 of all loans made last year. About the same is expected for fiscal 1957.
3. From inception of the program to June 30, 1956, total electric loans have been distributed as follows:

Distribution including system improvements	79.8%
Generation	9.1%
Transmission	10.2%
Section 5	0.9%

B--Electrification Construction Program

Construction Progress (Annual)

	<u>During Fiscal 1954</u>	<u>During Fiscal 1955</u>	<u>Estimate for Fiscal 1956</u>	<u>Estimate for Fiscal 1957</u>
Miles of line energized	44,187	32,439	25,000	25,000
Increase in consumers served	157,283	78,602	75,000	75,000

Note 1. Initial connection of consumers continues to decline. Some electrified farms are beginning to drop out of the total each because of consolidation with other farms, suburban growth, etc.

2. The number of miles of new line built each year is declining. Construction in 1957 is expected to be about as great as in 1956.

Cost of Distribution Line (December)

	<u>1940</u>	<u>1950</u>	<u>1953</u>	<u>1955</u>
Average cost per mile (Estimated) 1/ \$720 2/ \$1,909 3/ \$2,100 3/ \$2,280 3/				

1/ For system with density of 2.5 consumers per mile.

2/ Designed for an average of 90 kwh per consumer per month.

3/ Designed for an average of 300 kwh per consumer per month.

Note 1. Construction costs continue to rise.

C--Status of Electrification Borrowers

<u>Type of Borrowers</u>	<u>Number of Borrowers</u>			
	<u>June 30, 1946</u>	<u>June 30, 1950</u>	<u>June 30, 1955</u>	<u>June 30, 1956</u>
Cooperatives	918	980	979	980
Public Utility Districts	38	41	47	48
Other Public Bodies	20	24	26	26
Electric Companies	<u>20</u>	<u>25</u>	<u>25</u>	<u>24</u>
Total	996	1,070	1,077	1,078

Note: 1. Few new borrowers in recent years.

2. As of May 31, 1956, 80 borrowers had paid in full their debt obligations to the U. S. and 989 borrowers had debt obligations outstanding.

Operating Statistics, Calendar Year

	<u>1941</u>	<u>1950</u>	<u>1954</u>	Estimate for <u>1955</u>
	<u>millions</u>	<u>millions</u>	<u>millions</u>	<u>millions</u>
Operating revenues	\$ 35	\$ 241	\$ 408	\$ 425
Operating expenses	19	149	251	270
Net margin after depreciation and interest	--	19	44	60

Note 1. Rapid expansion in amount of business done by borrowers is reflected in the revenue and expense figures.

Distribution Borrower Averages

	<u>Dec. 31, 1953</u>	<u>Dec. 31, 1954</u>
Median weighted age, months.	92	101
Median Consumer density per mile	3.0	3.0
Median miles per system energized	1,155	1,220
Median consumers per energized system	3,164	3,406
Average amount loaned		\$2,548,824
Average amount advanced		\$2,211,061

Financial Status, cumulative

	<u>To Dec.31,1946</u>	<u>To Dec.31,1950</u>	<u>To June 30,1956</u>
	----- Dollars are in millions-----		
Total payments due	\$ 107	\$ 242	\$ 642
Total payments made	\$ 126	\$269	\$ 739
Principal	\$ 68	\$163	\$ 493
Interest	\$ 58	\$106	\$ 246
Payments in advance of due date	\$ 20	\$ 27	\$ 96
Payments delinquent over 30 days	\$ 0.9	\$ 0.7	\$ 0.3
Number of borrowers delinquent	62	43	10

Note: Delinquency, both amount overdue and number of borrowers with overdue payments, is at the lowest point of any time in recent years.

D--Power Consumption, Costs and Sources

Calendar Year Averages

	<u>1941</u>	<u>1946</u>	<u>1952</u>	<u>1954</u>	<u>Preliminary 1955</u>
Kwh consumption per consumer	919	1,602	2,760	3,360	3,696
Cost of energy purchased by borrowers (\$ per kwh) <u>1/</u>	1.00¢	0.88¢	0.79¢	0.76¢	0.74¢
Average revenue per kwh sold (including sales to other REA borrowers)	4.83¢	3.63¢	2.81¢	2.50¢	--

1/ On a fiscal year basis.

Note 1. Average annual consumption per consumer has quadrupled in the last 15 years.

2. Cost of purchased energy continues to edge downward.

3. Average price paid by consumers for electric energy continues to drop as their consumption increases.

Source of Power

	<u>Percent of Total kwh input by Source</u>			
	<u>Fiscal 1949</u>	<u>Fiscal 1952</u>	<u>Fiscal 1954</u>	<u>Fiscal 1955</u>
Generated and used by borrowers	8.2%	5.7%	5.3%	6.0%
Purchased from other borrowers	5.5%	7.9%	9.9%	11.6%
Purchased from Federal Agencies	22.6%	28.1%	30.7%	31.7%
Purchased from other public agencies	10.4%	7.9%	8.1%	7.8%
Purchased from power companies, industrial and manufacturing establishments.	<u>53.3%</u>	<u>50.4%</u>	<u>46.0%</u>	<u>42.9%</u>
Total input percent	100.0%	100.0%	100.0%	100.0%
billions of kwh	6.0	11.4 kwh	15.1 kwh	17.3 kwh

Notes: 1. The 1956 input will be more than 3 times the input in 1949. This reflects both an increased number of consumers and an increasing usage.

2. Although there has been no really significant change in the proportion of total power input obtained from the several sources in recent years, there has been a slight increase in the proportion generated by REA borrowers and in the purchases from Federal agencies. There has been a small decrease in the proportion of total input purchased from power companies, but not in the number of kwh purchased.

E--Farm Electrification

Progress in Farm Electrification

	<u>April 1, 1950</u>	<u>November 1954</u>	<u>June 30, 1955</u>
Total Farms in U. S.	5,382,134	4,782,393	--
Farms Electrified	4,154,359	4,448,462	4,468,043
Percent of farms electrified	77.2%	93.0	93.4

Note 1. Almost 54 percent of the Nation's farms which have central station electric service are served by REA borrowers.

KWH Consumption on Farms

<u>Year</u>	<u>Avg. No. Kwh used per month per farm</u>	<u>% increase in Avg. Mo. kwh use over previous year</u>
1948	121	--
1949	134	10.7%
1950	146	9.0
1951	165	13.0
1952	184	11.5
1953	203	10.3
1954	226	11.3
1955 preliminary	246	10.9

Notes: 1. For the 6-year period 1948-1954 average monthly farm consumption increased an average of about 17 kwh per month. Percentagewise the increase amounted to about 11% per year.

2. Farm kwh consumption is doubling in about 7 years.



